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wiring with

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A semiconductor device according to claim 1, where  
s are arranged from an edge of said semiconductor  
side.

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A semiconductor device according to claim 1, where  
s are arranged parallel to an edge of said semico  
wiring is bent at at least one position.

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7        a number of bumps disposed on said wiring respectively in  
8        confronting relationship with said chip electrodes and electrically  
9        connecting said wiring with said chip electrodes.

1           7. A semiconductor device according to claim 6, wherein said chip  
2 electrodes are arranged from an edge of said semiconductor chip toward  
3 its inner side.

1           8. A semiconductor device according to claim 6, wherein said chip  
2 electrodes are arranged parallel to an edge of said semiconductor chip  
3 and said wiring is bent at at least one position.

1           9. A semiconductor device according to claim 6, wherein said chip  
2 electrodes are arranged parallel to an edge of said semiconductor chip  
3 and said wiring has an end width larger than an inter-electrode distance  
4 between said chip electrodes.

1           10. A semiconductor device according to claim 6, wherein said  
2 chip electrodes comprise at least one kind of terminals selected from  
3 ground, power-source and signal terminals of said semiconductor chip.

Prob. 4  
A4

2 a TAB (tape automated bonding tape having a predetermined pattern

3 of wiring formed on one surface;

4 a semiconductor chip disposed on the other surface of said TAB

5 tape and having two or more chip electrodes in a common wiring layer;

6        said TAB tape having a number of through-holes; and

7 a number of bumps formed respectively in said through-holes in

8 confronting relationship with said chip electrodes and electrically

9 connecting said wiring with said chip electrodes.

1        12. A semiconductor device according to claim 11, wherein said

2 chip electrodes are arranged from an edge of said semiconductor chip

3 toward its inner side.

1        13. A semiconductor device according to ~~claim~~ 11, wherein said

2 chip electrodes are arranged parallel to an edge of said semiconductor

3 chip and said wiring is bent at at least one position.

1 14. A semiconductor device according to claim 11, wherein said

2 chip electrodes are arranged parallel to an edge of said semiconductor

3 ship and said wiring has an end width larger than an inter-electrode

4 distance between said chip electrodes.

1        15. ~~A semiconductor device according to claim 11, wherein said~~

2 chip electrodes comprise at least one kind of terminals selected from

3 ground, power-source and signal terminals of said semiconductor chip.

1        16. A semiconductor device comprises:

2 a TAB tape having a predetermined pattern of wiring formed on

3 one surface;

4 a semiconductor chip disposed on said one surface of said TAB

Two or more  
A bumps dis  
relationship wi  
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Two or more  
A bumps dis  
relationship wi  
iring with

10 17. A semiconductor device according to claim 16, wherein said  
11 chip electrodes are arranged from an edge of said semiconductor chip  
12 toward its inner side.

1 18. A semiconductor device according to claim 16, wherein said  
2 chip electrodes are arranged parallel to an edge of said semiconductor  
3 chip and said wiring is bent at at least one position.

1 19. A semiconductor device according to claim 16, wherein said  
2 chip electrodes are arranged parallel to an edge of said semiconductor  
3 chip and said wiring has an end width larger than an inter-electrode  
4 distance between said chip electrodes.

1 20. A semiconductor device according to claim 16, wherein said  
2 chip electrodes comprise at least one kind of terminals selected from  
3 ground, power-source and signal terminals of said semiconductor chip.

10 17. A semiconductor device according to claim 16, wherein said  
11 chip electrodes are arranged from an edge of said semiconductor chip  
12 toward its inner side.

1 18. A semiconductor device according to claim 16, wherein said  
2 chip electrodes are arranged parallel to an edge of said semiconductor  
3 chip and said wiring is bent at at least one position.

1 19. A semiconductor device according to claim 16, wherein said  
2 chip electrodes are arranged parallel to an edge of said semiconductor  
3 chip and said wiring has an end width larger than an inter-electrode  
4 distance between said chip electrodes.

1 20. A semiconductor device according to claim 16, wherein said  
2 chip electrodes comprise at least one kind of terminals selected from  
3 ground, power-source and signal terminals of said semiconductor chip.

10 17. A semiconductor device according to claim 16, wherein said  
11 chip electrodes are arranged from an edge of said semiconductor chip  
12 toward its inner side.

1 18. A semiconductor device according to claim 16, wherein said  
2 chip electrodes are arranged parallel to an edge of said semiconductor  
3 chip and said wiring is bent at at least one position.

1 19. A semiconductor device according to claim 16, wherein said  
2 chip electrodes are arranged parallel to an edge of said semiconductor  
3 chip and said wiring has an end width larger than an inter-electrode  
4 distance between said chip electrodes.

1 20. A semiconductor device according to claim 16, wherein said  
2 chip electrodes comprise at least one kind of terminals selected from  
3 ground, power-source and signal terminals of said semiconductor chip.

10 17. A semiconductor device according to claim 16, wherein said  
11 chip electrodes are arranged from an edge of said semiconductor chip  
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1 18. A semiconductor device according to claim 16, wherein said  
2 chip electrodes are arranged parallel to an edge of said semiconductor  
3 chip and said wiring is bent at at least one position.

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2 chip electrodes are arranged parallel to an edge of said semiconductor  
3 chip and said wiring has an end width larger than an inter-electrode  
4 distance between said chip electrodes.

1 20. A semiconductor device according to claim 16, wherein said  
2 chip electrodes comprise at least one kind of terminals selected from  
3 ground, power-source and signal terminals of said semiconductor chip.

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add  $D^5$